

Duvas
Technologies



In association with



Europa Environmental

Ambient Air - Multi Gas Monitor



KEY FEATURES

* GASES MONITORED

NO, NO₂, SO₂, O₃, BENZENE.

more in development and can be up-graded

* AUXILLIARY MEASUREMENTS

GPS position, Temperature, Humidity, Atmospheric Pressure.

* FUNCTIONALITY

Internal battery for up to 8 hours use

Power inlet from vehicle (12V) or mains

Ethernet and USB outputs

Sample Flow ~ 90lpm

Calibration Flow ~ 2-5 lpm

Weight ~ 15 Kg

Dimensions 800 x 200 x 200 mm

NOW YOU CAN MONITOR

WHEREVER YOU WISH

To accurately measure air quality you no longer need to invest in a large air conditioned shelter, a separate monitor for each gas and a truck full of auxiliary equipment. The **DUVAS D1000** is fully portable, battery powered optical monitor capable of measuring several criteria gas pollutants in one small instrument.

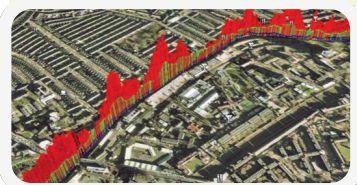
The D1000 features **parts per billion** detection capability not dissimilar to existing reference methods but measures the gases directly and with

much faster time resolution. This enables it to be used while on the move either on a vehicle, bicycle or on foot. Its internal **GPS and GPRS** communications ensure it knows exactly where it is and allows it to stream data back to the user in near real time. Of course, if you prefer you can deploy it in a fixed position, perhaps close to where your old monitoring station used to be, perhaps to prove that **BIG** is not always **BEAUTIFUL**.



Advanced Software for the Visualisation of Data

When monitoring on the move you must consider the manner in which you can use mobile data which is quite different from static data. We have developed a number of visualisation tools to assist with this. Data can be shown on a rendered map such as Google Earth™ and pollution concentrations shown as three dimensional charts on the map. Individual data points can also be overlaid on the

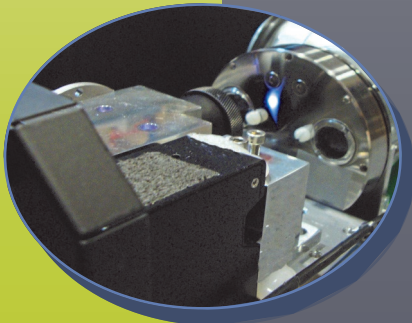


map as text or as a colour band relating to an air quality index.

Data can be streamed in near real time via cellular communications merged with weather and traffic flow data and broadcast to traffic management centres or environmental managers, planners or health researchers.



Why spend time extrapolating air pollution data from one or two fixed stations in the city when you can measure on the move and determine the true concentration anywhere you want?



The ability to measure air pollution in cities is often restricted by available space, power or planning restrictions which can be frustrating for many air quality monitoring professionals.

The equipment available to date has often been too large, required mains power or has lacked accuracy to meet the monitoring requirements. Of late some, so called “compact monitoring systems”, have promised much and delivered very little in terms of performance and reliability.

At the other end of the cost spectrum, diffusion tubes are certainly low cost but they lack the accuracy and the time resolution required. While reference monitors provide excellent performance they cannot be used in many situations due to their size and power requirements.

This is about to change with the introduction of **DUVAS**, a UV optical technology which for the first time, is able to deliver the accuracy required in a package that is both battery powered and is small and light enough to be used just about anywhere.

DUVAS or (Differential Ultra Violet Absorption Spectrometry) uses a well accepted optical technique proven over many years for the measurement of gases which are controlled by legislation such as NO₂, O₃, SO₂ etc.



The system has been developed at Imperial College London by DUVAS Technologies over the last 4 years and is now being launched as a commercial product by Europa Environmental who will distribute, and support the product.

Extensive laboratory and field trials have been carried out and are continuing currently as production volumes increase.

The system features advanced communications technology by Envirolgger which is also supplied and supported by Europa allowing it to integrate seamlessly with existing air quality monitoring networks.

Your local Europa distributor will be delighted to demonstrate the system and show you how easy it is to operate. The system requires minimal maintenance and both zero and span factors are stable over long periods further reducing operating costs. The system does not require air conditioning and is available in a weather - proof version suitable for outdoor use.

